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Date: December 17, 2003

PATENT

Paper No.

File: Freelng-P1-99

11/13
11-14-03

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Inventor	:	Kenneth A. Freelng
Serial No.	:	09/455,823
Filed	:	December 6, 1999
For	:	DIGITAL COMPUTER SYSTEM AND METHODS FOR CONDUCTING A POLL TO PRODUCE A DEMOGRAPHIC PROFILE CORRESPONDING TO AN ACCUMULATION OF RESPONSE DATA FROM ENCRYPTED IDENTITIES.
Group Art Unit	:	3621
Examiner	:	ZANG, Mary Da Zhi

BRIEF ON APPEAL
ON BEHALF OF APPELLANT

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IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Inventor : Kenneth A. Freeling
Serial No. : 09/455,823
Filed : December 6, 1999
For : DIGITAL COMPUTER SYSTEM AND METHODS FOR CONDUCTING A POLL TO PRODUCE A DEMOGRAPHIC PROFILE CORRESPONDING TO AN ACCUMULATION OF RESPONSE DATA FROM ENCRYPTED IDENTITIES.
Group Art Unit : 3621
Examiner : ZANG, Mary Da Zhi

Honorable Commissioner of Patents
and Trademarks
Washington, D.C. 20231

**BRIEF ON APPEAL
ON BEHALF OF APPELLANT**

SIR :

This is an appeal from the Final Action of the Examiner dated July 17, 2003, rejecting claims 1-31 pending in this application.

Please charge the fee under 37 C.F.R. § 1.17, the fee for Extension of Time for filing of this Brief, and any other fee necessary for filing this Brief on Appeal, or for further prosecution, to Deposit Account No. 50-0235.

I. R al Party In Int r st

Appellant, Kenneth A. Freeling, is the real party in interest in this matter.

II. **R elated Appeals and Interferences**

There are no related appeals or interferences.

III. **Status of All Claims**

Claims 1-3, 5-8, 12-15, 20, 22, 24/1-3, 24/5-8, 24/12-15, 24/20, 24/22, and 27-31 have been rejected pursuant to 35 USC Sec. 103; claims 4, 9-11, 16-19, 21, 23, 24/4, 24/9-11, 24/16-19, 24/21, 24/23, 25-26 have been found allowable but made subject to an objection as being based on a rejected claim.

IV. Status of All Amendments Filed Subsequent to Final Rejection

An amendment is filed herewith. Multiple Dependant Method Claims 30 and 31 have been amended to correct a dependence from an apparatus claim. Claims 28 and 29 have been amended to conform to Fig. 2 and clarify an ambiguity in the claims, i.e., the certifying and the research are carried out by separate computer systems.

V. C ncis Summary of th Invention

In a computer-aided method for conducting a survey, participants respectively provide demographic data on themselves and receive respective encrypted participant identifications from a certifying authority. The encrypted identifications are associated with the demographic information. A survey is conducted, and participants use their respective encrypted participant identifications to provide responses to a back end and research computer system, (see Fig. 2). There the responses are subjected to demographic analysis, by associating the encrypted identifications with the demographic information to form a demographic profile. However, by using only the encrypted identifications for the analysis, participants are assured that neither the pollster nor anyone else can associate the responses with a participant's real identity.

VI. Reading of Claims on the Specification

The claims on Appeal read on the specification as follows:

1. A computer-aided method for conducting a poll with high reliability to produce a demographic profile corresponding to an accumulation of response data from encrypted identities, the method including:
 - for each one of a plurality of local computers, carrying out registration substeps of:
 - (i.) receiving an application for participant registration, the application including participant identification data and participant demographic data; and
 - (ii.) if said application is accepted, then issuing respective registration data, including encrypted participant identification data;
 - thereafter, for a portion of the local computers, carrying out polling substeps of:
 - (iii.) receiving digital signals over the Internet including the encrypted participant identification data and poll response data for a first question in a poll...

...processing system for a process for conducting a poll with high reliability to produce a demographic profile corresponding to an accumulation of response data from encrypted identities.

Pg. 2, Lns. 6-9.

...local computers, carrying out registration... Pg. 9, Ln. 21.

...receiving an application for Participant registration, ... Participant identification data and Participant demographic data... Pg. 9, Lns. 22-23

...application is accepted, then issuing respective registration data, including encrypted Participant identification data...

Pg. 9, Lns. 23-24

...hereafter, for a portion of the local... carrying out polling... Pg. 9, Ln. 25

...digital signals over the Internet including the encrypted Participant identification data and poll response data for a first question in a poll... Pg. 9, Lns. 26-27.

and

(iv.) responsive to said receiving of said encrypted participant identification data, preventing more than one respective response to the first question; and

associating the encrypted participant identification data, the response data, and the demographic data, respectively, to produce a demographic profile corresponding to an accumulation of the response data from encrypted identities.

...responsive to said receiving of said encrypted Participant identification data, preventing ...respective response to the first question... Pg. 9, Lns. 27-29.

...associating the encrypted Participant identification data, the response data, and the demographic data, respectively, to ...profile corresponding to an accumulation of the response data from encrypted identities. Pg. 9, Ln. 29-Pg. 10, Ln. 2.

2. The method of claim 1, wherein said polling substeps and said step of associating are carried out devoid of the participant identification data.

...said polling substeps and said step of associating can be carried out devoid of the Participant identification data. Pg. 10, Lns. 5-6.

3. The method of claim 2, further including the step of generating a printed report including data generated from the accumulation of the response data and from the participant demographic data.

...generating a printed report including data generated from the accumulation of the response data and from the Participant demographic data. Pg. 10, Lns. 6-7.

4. The method of claim 2, further including the steps of generating a

...generating a report including an extract of some but not all from the group consisting

report including an extract of some but not all from the group consisting of the accumulation of response data from the first question, an accumulation of response data for a second question, and the demographic data; and

storing said extract on memory media to form an article of manufacture.

of the accumulation of response data from the first question, an accumulation of response data for a second question, and the demographic data... Pg. 10, Lns. 9-11.

...storing ... memory media to form an article of manufacture. Pg. 10, Lns. 11-12.

5. The method of claim 2, further including the step of generating a report including data generated from the group consisting of the accumulation of response data from the first question, an accumulation of response data for a second question, and the demographic data.

...generating a report including data generated from the group consisting of the accumulation of response data from the first question, an accumulation of response data for a second question, and the demographic data. Pg. 10, Lns. 14-16.

6. The method of claim 2, further including the step of off line generating certificates of authorization as a portion of said registration data.

... generating certificates of authorization as a portion of said registration data. Pg. 10, Ln. 18

7. The method of claim 6, wherein said certificates include a periodic time limit requiring updating said

...certificates include a periodic time limit requiring updating said demographic data. Pg. 10, Ln. 20

demographic data.

8. The method of claim 6,
wherein said demographic data cannot be
modified under participant control.

...demographic data cannot be modified
under Participant control. Pg. 10, Ln. 22.

9. The method of claim 2,
wherein said steps of carrying out the
polling substeps, and said associating the
encrypted identification data, the response
data, and the demographic data to produce
a demographic profile, do not include
accessing said participant identification
data.

...carrying out the polling substeps, and said
associating the encrypted identification
data, ...demographic data to produce a
demographic profile, do not include
accessing said Participant identification
data. Pg. 10, Lns. 24-26.

10. The method of claim 2,
wherein said step of receiving digital signals
over the Internet including the encrypted
identification data and data representing the
polling data for a first question in a poll is
computed asynchronously to computing for
said step of preventing more than one
response on the question for the
corresponding registration.

receiving digital signals over the Internet
including the encrypted identification data
and data representing the polling data for a
first question in a poll is computed
asynchronously to computing for said step
of preventing more than one response on
the question for the corresponding
registration. Pg. 10, Ln. 28-Pg. 11, Ln. 2.

11. The method of claim 10, wherein said step of preventing more than one response on the question for the corresponding registration includes allowing over-writing a prior response. ...preventing more than one response on the question for the corresponding registration includes allowing over-writing a prior response. Pg. 11, Lns. 4-5.

12. The method of claim 2, wherein said step of receiving from one of said computers an application for registration is carried out with said demographic data including a data set of at least three members from the group consisting of residence, age, gender, party, income, and race. ...receiving from one of said computers an application for registration is carried out with said demographic data including a data set of at least three members from the group consisting of residence, age, gender, party, income, and race. Pg. 11, Lns. 7-9.

13. The method of claim 2, wherein said step of receiving from one of said computers an application for registration is carried out with said demographic data including a data set of at least two members of the group consisting of residence, age, gender, party, income, and race, and said members are verified in determining if said application is accepted, said members verified by checking at least ...receiving from one of said computers an application for registration is carried out with said demographic data including a data set of at least two members of the group consisting of residence, age, gender, party, income, and race, and said members are verified in determining if said application is accepted, said members verified by checking at least one source from the group consisting of a charge card, a debit card, a

one source from the group consisting of a charge card, a debit card, a bank card, and a drivers license.

bank card, and a drivers license. Pg. 11, Lns. 11-16.

14. The method of claim 2, wherein said step of receiving digital signals over the Internet including the encrypted participant identification data is made verifiable by using a public key cryptographically-based digital signature.

...receiving digital signals over the Internet including the encrypted Participant identification data is made verifiable by using a public key cryptographically-based digital signature. Pg. 11, Lns. 18-19

15. The method of claim 2, further including the steps of generating a private key and a public key pair, and associating the public key with the demographic data and generating a respective participant client-side certificate.

...the steps of generating a private key and a public key pair, and associating the public key with the demographic data and generating a respective Participant client-side certificate. Pg. 11, Lns. 21-22

16. The method of claim 2, further including the step of cross-certifying an issuer of certificates for participant authentication.

...the step of cross-certifying an issuer of certificates for Participant authentication. Pg. 11, Ln. 24.

17. The method of claim 2, wherein said substeps of receiving an

...substeps of receiving an application for Participant registration, and issuing

application for participant registration, and issuing respective participant registration data are carried out with a certifying authority computer system; and wherein said sub step of receiving digital signals over the Internet is carried out by a politics portal web site, and further including the step of communicating said participant registration data from said certifying authority computer system to a computer system in communication with said politics portal web site.

respective Participant registration data are carried out with a certifying authority computer system... Pg. 11, Lns. 26-27 ...said substep of receiving digital signals over the Internet is carried out by a politics portal web site, and further including the step of communicating said Participant registration data from said certifying authority computer system to a computer system in communication with said politics portal web site. Pg. 11, Ln. 24-Pg. 12, Ln. 2

18. The method of claim 2, wherein said step of receiving digital signals over the Internet including the encrypted participant identification data and data representing response data includes receiving a response as a signed XML construct providing a pseudononymous identity for carrying out said step of associating the encrypted participant identification data, the response data, and the demographic data with the pseudononymous identity as the encrypted

...receiving digital signals over the Internet including the encrypted Participant identification data and data representing response data includes receiving a response as a signed XML construct providing a pseudononymous identity for carrying out said step of associating the encrypted Participant identification data, the response data, and the demographic data with the pseudononymous identity as the encrypted Participant identification data.

Pg. 12, Lns. 4-8

participant identification data.

19. The method of claim 2,
further including the step of disaggregating
said accumulation of the response data in
accordance with a portion of said
demographic data to produce the
demographic profile.

...disaggregating said accumulation of the
response data in accordance with a portion
of said demographic data to produce the
demographic profile. Pg. 12, Lns. 10-11

20. The method of claim 2,
further including the step of providing
equivalent computer systems for carrying
out the step of receiving the digital signals
over the Internet, said equivalent computer
systems communicating to form the
accumulation of response data.

...providing equivalent computer systems
for carrying out the step of receiving the
digital signals over the Internet, said
equivalent computer systems
communicating to form the accumulation of
response data. Pg. 12, Lns. 13-15.

21. The method of claim 2,
further including the step of receiving digital
signals over the Internet from a participant
including signals triggering a voiding of the
corresponding prior response data for the
first question in a poll.

...receiving digital signals over the Internet
from a Participant including signals
triggering a voiding of the corresponding
prior response data for the first question in
a poll. Pg. 12, Lns. 17-18

22 The method of claim 2,

...encrypting a database formed by carrying

wherein further including the step of
encrypting a database formed by carrying
out said step of associating.

out said step of associating. Pg. 12, Ln. 20.

23 The method of claim 2,
wherein further including the step of forming
a data structure mapping a database
formed by carrying out said step of
associating, said data structure mapping
the database to consistently form a pattern
of data types.

...a data structure mapping a database
formed by carrying out said step of
associating, said data structure mapping
the database to consistently form a pattern
of data types. Pg. 12, Lns. 22-23.

24. The method of any one of
claims 1-23, wherein the step of issuing
respective registration data, including
encrypted participant identification data,
includes issuing a schema including said
participant demographic data.

...of issuing respective registration data,
including encrypted Participant identification
data, includes issuing a schema including
said Participant demographic data. Pg. 12,
Lns. 25-26.

25. The method of any one of
claims 1-23, further including the step of
providing duplicative electronic pathways for
carrying out the step of receiving digital
signals over the Internet.

...providing multiple electronic pathways for
carrying out the step of receiving digital
signals over the Internet. Pg. 12, Lns. 28-

29

26. The method of any one of claims 1-23, further including linking a remotely mirrored logging facility to a host computer carrying out said step of receiving of said encrypted participant identification data; and providing said host computer with redundant power and redundant internet feeds. ...linking a remotely mirrored logging facility to a host computer carrying out said step of receiving of said encrypted Participant identification data; and providing said host computer with redundant power and redundant Internet feeds. Pg. 13, Lns. 1-4

27. A method for high reliability communication of demographic data from encrypted identities, the method including:

(i.) certifying, by computer, a plurality of respective registrations by substeps including:

receiving a plurality of respective participant registration applications including respective participant identification data and participant demographic data; and for any respective one of said applications accepted for authorization, issuing respective registration data, including encrypted participant identification data and encrypted participant demographic data; and ...high reliability communication of demographic data from encrypted identities... Pg. 15, Lns. 21-22

...certifying, by computer, a plurality of respective registrations by substeps including:

...receiving a plurality of respective Participant registration applications including respective Participant identification data and Participant demographic data... Pg. 15, Lns. 23-25

...one of said applications accepted for authorization, issuing respective registration data, including encrypted Participant identification data and encrypted Participant demographic data... Pg. 15, Lns. 25-27

(ii.) using, by computer, said registration data in substeps of:
respectively receiving said registration data and query-responsive digital signals; and
associating, by computer, said encrypted participant identification data respectively with said registration data and said query-responsive digital signals in producing an accumulation such that it is not possible to directly associate said participant identification data with either said registration data or said query-responsive digital signals.

28. A machine for conducting a poll with high reliability to produce a demographic profile corresponding to an accumulation of response data from encrypted identities, the machine including:
a digital electrical computer apparatus including a digital computer having a processor, the processor electrically connected to a memory device for storing and retrieving machine-readable

...using, by computer, said registration data... Pg. 15, Ln. 28
...respectively receiving said registration data and query-responsive digital signals... Pg. 15, Lns. 28-29
...associating, by computer, said registration data and said query-responsive digital signals in producing an accumulation. Pg. 15, Ln. 29-Pg. 16, Ln. 1
...send the data received in Step 126 to printed reports of accumulation or extraction of polling data and demographic data. Pg. 32, Lns. 9-11

...can be carried out by a machine... Pg. 9, Ln. 15; ...conducting a poll with high reliability to produce a demographic profile corresponding to an accumulation of response data from encrypted identities... Pg. 9, Lns. 19-20
...digital electrical computer 4, and processor 2, including storing the respective digital electrical signals in the memories 8 and 10. Pg. 25, Lns. 17-18

signals, to an input device for receiving input data and converting the input data into input electrical data, and to an output device for converting output electrical data into output having a visual presentation, the processor being programmed to control the apparatus to receive the input data and to produce the output data by steps including:

(i.) carrying out registration

substeps of:

receiving a participant registration application including participant identification data and participant demographic data; and

if said application is accepted, then issuing respective registration data, including encrypted participant identification data; and

(ii.) thereafter, carrying out

polling substeps of:

receiving digital signals over the Internet including the encrypted participant identification data and poll response data for a first question in a poll; and

responsive to said receiving of said

...storing said extract on memory media to form an article of manufacture.... Pg. 10, Lns. 11-12

...A visual display unit 14 can be employed for a visual representation... Pg. 24, Lns. 9-10

...carrying out registration... Pg. 9, Ln. 21

...receiving an application for Participant registration...identification data and Participant demographic data... Pg. 9, Lns. 22-23

...if said application is accepted, then issuing respective registration data, including encrypted Participant identification data... Pg. 9, Lns. 23-24

...receiving digital signals over the Internet including the encrypted Participant identification data...for a first question in a poll... Pg. 9, Lns. 25-27

...responsive to said receiving of said

encrypted participant identification data, preventing more than one respective response to the first question; and associating the encrypted participant identification data, the response data, and the demographic data, respectively, to produce a demographic profile corresponding to an accumulation of the response data from encrypted identities.

29. A method for making machine for conducting a poll with high reliability to produce a demographic profile corresponding to an accumulation of response data from encrypted identities, the method including the steps of:

- providing a digital electrical computer apparatus including a digital computer having a processor, the processor electrically connected to a memory device for storing and retrieving machine-readable signals, to an input device for receiving input data and converting the input data into input electrical data, and to an output device for converting output electrical data into encrypted Participant identification data, preventing...response to the first question... Pg. 9, Lns. 27-29
- ...associating the encrypted Participant identification data, the response data, and ...produce a demographic profile corresponding to an accumulation of the response data from encrypted identities.

Pg. 9, Ln. 29-Pg. 10, Ln. 2

...can be carried out by a machine... Pg. 9, Ln. 15; ...conducting a poll with high reliability to produce a demographic profile corresponding to an accumulation of response data from encrypted identities...

Pg. 9, Lns. 19-20

- ...digital electrical computer 4, and processor 2, including storing the respective digital electrical signals in the memories 8 and 10. Pg. 25, Lns. 17-18
- ...storing said extract on memory media to form an article of manufacture.... Pg. 10, Lns. 11-12
- ...A visual display unit 14 can be employed for a visual representation... Pg. 24, Lns. 9-

output having a visual presentation; 10

programming the processor being

programmed to control the apparatus to

receive the input data and to produce the

output data by steps including:

(i.) carrying out registration ...carrying out registration... Pg. 9, Ln. 21

substeps of:

receiving a participant registration ...receiving an application for Participant

application including participant registration...identification data and

identification data and participant Participant demographic data... Pg. 9, Lns. 22-23

demographic data; and ...if said application is accepted, then

if said application is accepted, then issuing respective registration data,

issuing respective registration data, including encrypted Participant identification

including encrypted participant identification data... Pg. 9, Lns. 23-24

data; and

(ii.) thereafter, carrying out ...receiving digital signals over the Internet

polling substeps of:

receiving digital signals over the including the encrypted Participant

Internet including the encrypted participant identification data...for a first question in a

identification data and poll response data poll... Pg. 9, Lns. 25-27

for a first question in a poll; and ...responsive to said receiving of said

responsive to said receiving of said encrypted Participant identification data,

encrypted participant identification data, preventing...response to the first question...

preventing more than one respective Pg. 9, Lns. 27-29

response to the first question; and ...associating the encrypted Participant

identification data, the response data, and

associating the encrypted participant identification data, the response data, and the demographic data, respectively, to produce a demographic profile corresponding to an accumulation of the response data from encrypted identities. ...produce a demographic profile corresponding to an accumulation of the response data from encrypted identities.

Pg. 9, Ln. 29-Pg. 10, Ln. 2

30. The method of any one of claims 1, 28, 29, and 30, wherein said issuing respective registration data includes issuing respective registration data as an electronic message for storing in a browser. ...issuing respective registration data includes issuing respective registration data as an electronic message for storing in a browser... Pg. 16, Lns. 3-4

31. The method of any one of claims 1, 28, 29, and 30, wherein said issuing respective registration data includes issuing respective registration data into memory of a smartcard. ...issuing respective registration data includes issuing respective registration data as an electronic message for storing in a browser or in memory of a smartcard. Pg. 16, Lns. 3-4

VII. Concise Statement of All Issues Presented for Review

A. Pursuant to 35 §U.S.C. 103(a), have claims 1-3, 5-8, 12-15, 20, 22, 24/1-3, 24/5-8, 24/12-15, 24/20, 24/22, and 27-31 been shown obvious based on Challenger in view of McClure?

VIII. Grouping of Claims for Each Ground of Rejection Which Appellant Contests

The claims do not stand or fall together, and an explanation as to why appears in the argument section below.

Group 1: 1-3, 5-8, 12-15, 20, 22, 24/1-3, 24/5-8, 24/12-15, 24/20, 24/22, 28, and 29.

1. Obviousness has not been shown because cited art fails to disclose expressly claimed requirements.
 - a. ...associating the encrypted participant identification data...
 - b. ...responsive to said receiving of said encrypted participant identification data...preventing more than one response...

Group 2: Claim 2

1. Obviousness has not been shown because cited art fails to disclose expressly claimed requirements.
 - a. ...said polling substeps and said step of associating are carried out devoid of the participant information data

Group 3: Claim 3

1. Obviousness has not been shown because cited art fails to disclose expressly claimed requirements.
 - a. ...further including the step of generating a printed report including data generated from the accumulation of the response data and from the participant demographic data

Group 4: Claim 5

1. Obviousness has not been shown because cited art fails to disclose expressly claimed requirements.
 - a. ...further including the step of generating a report including data from the group consisting of the accumulation of response data from the first question, an accumulation of the response data for a second question, and the demographic data

Group 5: Claim 6

1. Obviousness has not been shown because cited art fails to disclose expressly claimed requirements.
 - a. ...further including the step of generating off line generating

certificates of authorization as a portion of said registration data

Group 6: Claim 7

1. Obviousness has not been shown because cited art fails to disclose expressly claimed requirements.
 - a. ...wherein said certificates include periodic time limit requiring updating said demographic data

Group 7: Claim 8

1. Obviousness has not been shown because cited art fails to disclose expressly claimed requirements.
 - a. ...wherein said demographic data cannot be modified under participant control

Group 8: Claim 12

1. Obviousness has not been shown because cited art fails to disclose expressly claimed requirements.
 - a. ...with said demographic data including a data set of at least three members from the group consisting of residence, age, gender, party, income, and race

Group 9: Claim 13

1. Obviousness has not been shown because cited art fails to disclose expressly claimed requirements.
 - a. ...with said demographic data including a data set of at least two members from the group consisting of residence, age, gender, party, income, and race...and said members are verified by checking at least one source from the group consisting of a charge card, a debit card, a bank card, and a driver's license...

Group 10: Claim 14

1. Obviousness has not been shown because cited art fails to disclose expressly claimed requirements.
 - a. ...verifiable by using a public key cryptographically-based digital signature.

Group 11: Claim 15

1. Obviousness has not been shown because cited art fails to disclose expressly claimed requirements.
 - a. ...further including the steps of generating a private key and a public key pair, and associating the public key with the demographic data and generating a respective participant client-side certificate

Group 12: Claim 20

1. Obviousness has not been shown because cited art fails to disclose expressly claimed requirements.
 - a. ...providing equivalent computer systems for carrying out the step of receiving the digital signals over the Internet, said equivalent computer systems communicating to form accumulation of response data

Group 13: Claim 22

1. Obviousness has not been shown because cited art fails to disclose expressly claimed requirements.
 - a. ...further including the step of encrypting a database formed by carrying out said step of associating...

Group 14: Claims 24/1-6, 24/12-15, 24/20, and 24/22

1. Obviousness has not been shown because cited art fails to disclose expressly claimed requirements.
 - a. ...includes issuing a schema including said participant demographic data

Group 15: Claim 27

1. Obviousness has not been shown because cited art fails to disclose expressly claimed requirements.
 - a. ...certifying, by computer...
 - b. ...respectively receiving said registration data and query-responsive digital signals
 - c. ...associating, by computer, said encrypted participant identification data respectively with said registration data and said query-responsive digital signals in producing an accumulation

- d. ...such that it is not possible to directly associate said participant identification data with either said registration data or said query-responsive digital signals

Group 16: Claims 28-29

- 1. Obviousness has not been shown because cited art fails to disclose expressly claimed requirements.

Group 17: Claim 30

- 1. Obviousness has not been shown because cited art fails to disclose expressly claimed requirements.
 - a. ...storing in a browser

Group 18; Claims 30-31

IX. Argum ent

A. Law

The legal standard for determining obviousness pursuant to 35 U.S.C. Sec. 103 is stated in *Graham v. John Deere Co.*, 383 U.S. 1 (1966). The U.S. Supreme Court held that in applying Section 103, "the scope of the prior art is to be determined; differences between the prior art and the claims at issue are to be ascertained; and the level of ordinary skill in the art is to be ascertained." *Deere* at 17. Accordingly, the CCPA has ruled that 35 U.S.C. Sec. 103 places the burden on the PTO to establish obviousness. *In re Reuter*, 651 F.2d 751, 210 USPQ 249 (CCPA 1981).

In rejecting claims under 35 U.S.C. Sec. 103, an Examiner bears the initial burden of presenting a *prima facie* case of obviousness. *In re Oetiker*, 977 F.2d 1443, 1445, 24 USPQ 2d. 1443, 1444 (Fed. Cir. 1992). Only if that burden is met, does the burden of coming forward with evidence or argument shift to the Appellant. *Id.*

"A *prima facie* case of obviousness is established when the teachings from the prior art itself would appear to have suggested the claimed subject matter to a person of ordinary skill in the art."

In re Bell, 991 F.2d 781, 782, 26 USPQ2d 1529, 1531 (Fed. Cir. 1993) (quoting *In re Rinehart*, 531 F.2d 1048, 1051, 189 USPQ 143, 147 (CCPA 1976)).

When making a determination concerning obviousness, all limitations of the claim must be evaluated. 35 U.S.C. Sec. 103; *In re Miller*, 418 F.2d 1392, 64 USPQ 46 (CCPA 1969). Further, there must be some logical reason apparent from the record that would justify modification of the reference. *In re Royal*, 188 USPQ 132 (CCPA 1975).

If the Examiner fails to establish a *prima facie* case, the rejection is improper and will be overturned. *In re Fine*, 837 F.2d 1071, 1074; 5 USPQ2d 1596, 1598 (Fed. Cir. 1988).

B. Argument

1. Ov rvi w

This is an easy case. In rejecting the claims, the Examiner contends that Challener teaches the claimed associating the encrypted participant identification data.... of claims 1, 28, and 29. See also claim 27.

But Challener teaches the opposite, i.e., to “decrypt the message to determine the identity of the voter” at Col. 7, line 62. Thus, Challener *decrypts* to process the data, while Appellant’s claims require processing the encrypted participant identification data....

No art of record teaches or suggests Applicant’s claimed feature, and thus no combination of the cited art can render the claimed invention obvious. Accordingly, a *prima facie* case of statutory obviousness has not been made out based on the cited art, and the rejection must be reversed.

2. Detailed Discussion

- A. **Group 1: 1-3, 5-8, 12-15, 20, 22, 24/1-3, 24/5-8, 24/12-15, 24/20, 24/22, 28, and 29**
 - 1. **Obviousness has not been shown because cited art fails to disclose expressly claimed requirements**
 - a. ...associating the encrypted participant identification data...

The cited art fails to disclose expressly claimed requirements, and *prima facie* statutory obviousness therefore has not been made out. *In re Fine*.

More particularly, claims 1, 28, and 29 require...

associating the encrypted participant identification data, the response data, and the demographic data, respectively, to produce a demographic profile corresponding to an accumulation of the response data from encrypted identities.

This method step is not disclosed in the cited art.

In the Office Action dated 5/08/02, at page 4, the Examiner writes that “Challener teaches... associating the encrypted data...(Fig. 7).”

To the contrary, Fig 7. shows the opposite. There are 3 critical boxes in Fig. 7:

SEND ENCRYPTED INFORMATION TO AUTHENTICATION SERVER 379; UTILIZE AUTHENTICATION SERVER TO DECRYPT MESSAGE 381; and ARE IDs AUTHENTIC 383.

Fig. 7 shows that encrypted data sent in box 379 is *decrypted* in box 381 before being processed in box 383 etc.

Not only does the Fig. 7 contradict the Examiner's contention, Challenger's specification also explicitly teaches *decypting* data prior to a time when any associating could be done. Challener is not doing the claimed associating encrypted data as Challener explicitly states: "... the authentication server is utilized to decrypt the message to determine the identity of the voter" (Col. 7, line 62). Indeed, Challener states that subsequent to the decryption in box 381: "in accordance with block 383, the authentication server examines the identification information to determine whether the identification is authentic..." Thus, Challener's examining is carried out with *decrypted* data, and there is no teaching or suggestion or even capability to do Appellant's claimed associating the encrypted participant identification data...to produce a demographic profile.

In the Amendment and Response filed November 7, 2002, Appellant presented the argument that Challener *decrypts* its data before any associating would even be arguably possible, so Challener cannot teach or even handle Appellant's claimed associating the encrypted participant identification data.... However, the Examiner replied at the bottom of page 7 of the Final Rejection:

In response to Appellant's argument that Challener fails to teach associating the encrypted participant identification data as claimed in claims 1, 28 and 29, examiner believes that Challener teaches this matter, in particular at column 7, lines 50-60.

The Board's attention is drawn to where the Examiner directs as the basis of the rejection. There is nothing at that location or elsewhere in Challener teaches or suggests the claimed method step of:

associating the encrypted participant identification data, the response

data, and the demographic data, respectively, to produce a demographic profile corresponding to an accumulation of the response data from encrypted identities

The Examiner's position is not easy to understand especially because Appellant's claim 1 makes multiple references to the encrypted participant identification data, and whatever the Examiner is thinking of does not seem to fit all the claim requirements for the encrypted participant identification data. Additionally, in response to the Examiner's comments in the Final Rejection, whether a smart card is used or not, the voter identification is encrypted onto the card as per Challener Col. 3, lines 10-11, and *decrypted* by UTILIZE AUTHENTICATION SERVER TO DECRYPT MESSAGE 381 before any processing involving the *known* voter identity.

Respectfully, Appellant cannot explain the rejection in view of what seems to be an explicit contradiction in Challener of the Examiner's contention. In sum, though, the cited art fails to disclose expressly claimed requirements, and that *prima facie* statutory obviousness therefore has not been made out. If the Examiner fails to establish a *prima facie* case, the rejection is improper and will be overturned. *In re Fine*.

b. ...responsive to said receiving of said encrypted participant identification data ... preventing more than one response...

The cited art fails to disclose a second expressly claimed requirement, and *prima facie* statutory obviousness therefore has not been made out. *In re Fine*.

More particularly, claims 1, 28, and 29 require...

responsive to said receiving of said encrypted participant identification data, preventing more than one respective response to the first question;

On this point, in the Office Action dated 5/08/02, at page 3, the Examiner writes that Challener teaches:

responsive to said receiving of said encrypted participant identification data, preventing tampering and repudiation in response to the first question (Fig. 7-8)

In response, first, even if this contention were true, this is not what Appellant

claims. Second, the contention is not true, and more to the point, Challener is handling decrypted data and is not doing any preventing etc. responsive to said receiving of said encrypted participant identification data. Not too, that these claims have multiple mention of the encrypted participant identification data, and whatever fits one requirement must also fit the other requirement. The Examiner also has not made a contention that consistently fits all claim references to the claimed encrypted participant data.

The Office Action continues at page 4 that

Challener does not specifically teach preventing more than one respective response to the first question. McClure teaches a voter is able to cast one and only one ballot (column 36 lines 66-67). It would have been obvious...

Again, even if this were true, this is not what Appellant claims. Also, McClure does not teach what is claimed, i.e., ...responsive to said receiving of said encrypted participant identification data preventing more than one respective response to the first question. Further, a teaching of a means preventing casting more than one ballot is not a teaching of a method step of preventing more than one respective response to the first question.

The Board's attention is drawn to the section relied upon by the Examiner to verify that the claimed method step is not disclosed as the Examiner contends.

So neither of the applied art citations disclose a second expressly claimed requirement, and that *prima facie* statutory obviousness therefore has not been made out. If the Examiner fails to establish a *prima facie* case, the rejection is improper and will be overturned. *In re Fine*.

B. Group 2: Claim 2

- 1. Obviousness has not been shown because cited art fails to disclose expressly claimed requirements**
 - a. ...said polling substeps and said step of associating are carried out devoid of the participant information data**

Please incorporate by reference the foregoing, regarding Group 1, and note that

the cited art fails to disclose yet another expressly claimed requirement of claim 2 and that prima facie statutory obviousness therefore has not been made out. *In re Fine*. More particularly, claim 2 requires:

...said polling substeps and said step of associating are carried out devoid of the participant information data

The Examiner concedes that "...Challener modified by McClure does not specifically teach devoid of the participant identification data." With no teaching or suggestion in the cited art of the method step, the Examiner apparently makes up what is contended to be prior art evidenced. The Examiner asserts in the Final Rejection at page 4, lines 5-9, that applicant's claim requirement would have been obvious "because the next voter or other people who review the voting screen would not know whom said participant voted for, and it would keep voting private." Respectfully, this has nothing to do with the claim and is pure hindsight imagination. The claim requires actually carrying out the polling substeps... devoid of the participant information data, not some activity between the polling of different voters.

So neither of the applied art citations disclose an expressly claimed requirement, and that prima facie statutory obviousness therefore has not been made out. If the Examiner fails to establish a prima facie case, the rejection is improper and will be overturned. *In re Fine*.

C. Group 3: Claim 3

1. **Obviousness has not been shown because cited art fails to disclose expressly claimed requirements**
 - a. ... further including the step of generating a printed report including data generated from the accumulation of the response data and from the participant demographic data

Please incorporate by reference the foregoing, especially regarding Group 1, and Group 2, and note that the cited art fails to disclose a second expressly claimed requirement of claim 3 and that prima facie statutory obviousness therefore has not been made out. *In re Fine*. More particularly, claim 3 requires:

further including the step of generating a printed report including data generated from the accumulation of the response data and from the participant demographic data.

The Examiner contends, at page 4, lines 11-12 of the Final Rejection, that this is disclosed in Figs. 1A and 1C. However, the claim requirement is not shown in these Figures or anywhere else in Challener.

If Appellant can correctly guess what the Examiner has in mind, perhaps the Examiner believes that the votes tabulated by geographic area constitute the printed report including data generated from the accumulation of the response data and from the participant demographic data. But this cannot be a correct claim interpretation because the Examiner seems to have previously contended that in parent claim 1, the votes are either the accumulation or the demographic profile. (Appellant respectfully is not sure what the Examiner is contending.) But whatever the case may be, the accumulation, the demographic profile, and the report are all positively recited separate requirements, so they cannot be shown in one of anything. Note that the instant claim requires further including the step of generating...

In sum, although the Examiner points to Challener's Figs. 1A and 1C, there is no teaching of the instant dependent claim requirement:

further including the step of generating a printed report including data generated from the accumulation of the response data and from the participant demographic data.

So neither of the applied art citations disclose an expressly claimed requirement, and that prima facie statutory obviousness therefore has not been made out. If the Examiner fails to establish a prima facie case, the rejection is improper and will be overturned. *In re Fine*.

D. Group 4: Claim 5

1. Obviousness has not been shown because cited art fails to disclose expressly claimed requirements

a. ... further including the step of generating a report including data generated from the group consisting of the accumulation of responses

data from the first question, an accumulation of response data for a second question, and the demographic data

Please incorporate by reference the foregoing, especially regarding Group 1, and Group 2, and note that the cited art fails to disclose an expressly claimed requirement of claim 5 and that *prima facie* statutory obviousness therefore has not been made out. *In re Fine*. More particularly, claim 5 requires:

further including the step of generating a report including data generated from the group consisting of the accumulation of response data from the first question, an accumulation of response data for a second question, and the demographic data.

The Examiner contends, at page 4, lines 13-16 of the Final Rejection, that this is disclosed in Fig. 1A. The Board is invited to look to the figure to confirm that the claimed method step is not disclosed in Figure 1A or else wherein Challener.

If Appellant can correctly guess what the Examiner is contending on this too, perhaps the Examiner believes that the votes tabulated by geographic area constitute the report including data generated from the group consisting of the accumulation of response data from the first question, an accumulation of response data for a second question, and the demographic data. But this cannot be correct because the Examiner seems to have previously contended that in claim 1, the votes are either the accumulation or the demographic profile. (Appellant respectfully is not sure what the Examiner is contending.) But because the accumulation or the demographic profile and the report are all positively recited separate requirements, they cannot be shown in one of anything. Note that the instant claim requires further including the step of generating...

In sum, although the Examiner points to Fig. 1A, there is no teaching of Appellant's claim requirements.

So neither of the applied art citations disclose an expressly claimed requirement, and that *prima facie* statutory obviousness therefore has not been made out. If the Examiner

fails to establish a prima facie case, the rejection is improper and will be overturned. *In re Fine*.

E. Gr up 5: Claim 6

1. **Obviousness has not been shown because cited art fails to disclose expressly claimed requirements**
 - a. **... further including the step of generating off line generating certificates of authorization as a portion of said registration data**

Please incorporate by reference the foregoing, especially regarding Group 1, and Group 2, and note that the cited art fails to disclose an expressly claimed requirement of claim 6 and that prima facie statutory obviousness therefore has not been made out. *In re Fine*. More particularly, claim 6 requires:

... further including the step of generating off line generating certificates of authorization as a portion of said registration data

The Examiner contends, at page 4 of the Final Rejection, that this is disclosed in Col. 4, lines 24-46. The Board is invited to look to that portion of Challener relied upon by the Examiner to confirm that nothing about certificates of authorization is disclosed, and more so the claimed method step is not disclosed either.

The Examiner appears to be contending that any off line registration would teach the claimed method step. This is plainly incorrect, and a brief review the discussion the discussion of authorization certificates in Appellant's specification will further demonstrate that the rejection is also a misconstruction of the claims in this regard.

So neither of the applied art citations disclose an expressly claimed requirement, and that prima facie statutory obviousness therefore has not been made out. If the Examiner fails to establish a prima facie case, the rejection is improper and will be overturned. *In re Fine*.

F. Group 6: Claim 7

1. **Obviousness has not been shown because cited art fails to discl s xpressly claim d requir m nts**
 - a. **... wh r in said c rtificat s includ a periodic tim**

limit requiring updating said demographic data

Please incorporate by reference the foregoing, especially regarding Group 1, Group 2, and Group 5, and note that the cited art fails to disclose an expressly claimed requirement of claim 7 and that *prima facie* statutory obviousness therefore has not been made out. *In re Fine*. More particularly, claim 7 requires:

... wherein said certificates include a periodic time limit requiring updating said demographic data

The Examiner contends, at page 4 of the Final Rejection, that this is disclosed in Col. 4, lines 24-46. The Board is invited to look to that portion of Challener relied upon by the Examiner to confirm that nothing about certificates of authorization is disclosed where the Examiner asserts or mentioned anywhere else in Challener, either. And as certificates of authorization are not mentioned in Challener, Appellant's method step carried out with certificates include a periodic time limit requiring updating said demographic data cannot be disclosed either.

Appellant cannot explain the Examiner's rejection because certificates of authorization are not mentioned in Challener, and no method step involving them is disclosed either. In any case, neither of the applied art citations disclose an expressly claimed requirement, and that *prima facie* statutory obviousness therefore has not been made out. If the Examiner fails to establish a *prima facie* case, the rejection is improper and will be overturned. *In re Fine*.

G. Group 7: Claim 8

1. Obviousness has not been shown because cited art fails to disclose expressly claimed requirements

a. ... wherein said demographic data cannot be modified under participant control

Please incorporate by reference the foregoing, especially regarding Group 1, Group 2, and Group 6, and note that the cited art fails to disclose an expressly claimed

requirement of claim 8 and that *prima facie* statutory obviousness therefore has not been made out. *In re Fine*. More particularly, claim 8 requires:

... wherein said demographic data cannot be modified under participant control...

Contrary to the Examiner's rejection, Challener teaches the exact opposite to Appellant's claim requirement. Challener teaches that "the various data objects... *may* be periodically updated by a user...." Col. 4, lines 64-65 (Italics added). As per Col. 5, lines 49-50, access to the data in Challener is lockable to enable access by one user, but not by unauthorized users.

The Board is invited to compare that portion of Challener relied upon by the Examiner (in the Final Rejection at page 5: Col. 4, line 59-Col. 5, line 5) to confirm that Challener does not teach the claimed method step of ... wherein said demographic data cannot be modified under participant control.... More so, Challener's teaching as a positive teaching does not constitute a teaching of a negative, and the instant claim limitation is a negative limitation undisclosed in Challener.

Neither of the applied art citations disclose an expressly claimed requirement, and that *prima facie* statutory obviousness therefore has not been made out. If the Examiner fails to establish a *prima facie* case, the rejection is improper and will be overturned. *In re Fine*.

H. Group 8: Claim 12

1. Obviousness has not been shown because cited art fails to disclose expressly claimed requirements

a. ... with said demographic data including a data set of at least three members from the group consisting of residence, age, gender, party, income, and race

Please incorporate by reference the foregoing, especially regarding Group 1 and Group 2, and note that the cited art fails to disclose an expressly claimed requirement of claim 12 and that *prima facie* statutory obviousness therefore has not been made out. *In re Fine*.

More particularly, claim 12 requires:

... with said demographic data including a data set of at least three members from the group consisting of residence, age, gender, party, income, and race ...

The Examiner contends, at page 5 of the Final Rejection, that this is disclosed in Col. 7, lines 54-57: "... includes the voter's name, address, voter registration number, social security number, driver's license, or any other identification data."

Claim 12 must be interpreted in the context of claim 1, from which it indirectly depends, and claim 1 makes further requirements of the demographic data as follows:

associating the encrypted participant identification data, the response data, and the demographic data, respectively, to produce a demographic profile corresponding to an accumulation of the response data from encrypted identities.

Apparently, the Examiner is contending that Challener uses the Examiner's above-contended personal voter information as the demographic data to produce the claimed demographic profile. This cannot possibly be correct because a demographic profile revealing the personal voter information would seem to be illegal. Also, the contention is not consistent with Challener's object to maintain "voting which can accommodate the various legal and regulatory requirements..." Col. 1, line 62 etc. The Board is invited to confirm that Challener does not teach anything that meets the requirements of Appellant's claim as a *whole*, which shows that the Examiner is simply engaging in a cut and paste attempt to cover one claim requirement without taking into consideration the requirements of the invention as a whole.

Neither of the applied art citations disclose an expressly claimed requirement, and that *prima facie* statutory obviousness therefore has not been made out. If the Examiner fails to establish a *prima facie* case, the rejection is improper and will be overturned. *In re Fine*, 837 F.2d 1071, 1074; 5 USPQ2d 1596, 1598 (Fed. Cir. 1988).

I. **Group 9: Claim 13**

1. **Obviousness has not been shown b_caus_cited art fails to disclose expressly claim d_r_quir_ments**

a. ... with said demographic data including a data set of at least two members from the group consisting of residence, age, gender, party, income, and race ... and said members are verified by checking at least one source from the group consisting of a charge card, a debit card, a bank card, and a driver's license...

Please incorporate by reference the foregoing, especially regarding Group 1, Group 2, and Group 8, and note that the cited art fails to disclose an expressly claimed requirement of claim 13 and that *prima facie* statutory obviousness therefore has not been made out. *In re Fine*. More particularly, claim 13 requires:

... with said demographic data including a data set of at least two members from the group consisting of residence, age, gender, party, income, and race ... and said members are verified by checking at least one source from the group consisting of a charge card, a debt card, a bank card, and a driver's license...

The Examiner contends, at page 5 of the Final Rejection, that this is disclosed in Col. 7, lines 54-57: "... includes the voter's name, address, voter registration number, social security number, driver's license, or any other identification data."

First, note as per the discussion of claim 13, also to be considered is the context of claim 1, from which claim 13 indirectly depends, and claim 1 makes further requirements of the demographic data as follows:

associating the encrypted participant identification data, the response data, and the demographic data, respectively, to produce a demographic profile corresponding to an accumulation of the response data from encrypted identities.

Apparently, the Examiner is contending that Challener uses the Examiner's above-contended personal voter information as the demographic data to produce the claimed demographic profile. This cannot possibly be correct because a demographic profile revealing the personal voter information would seem to be illegal. The contention also is not consistent with Challener's object to maintain "voting which can accommodate the various legal and regulatory requirements..." Col. 1, line 62 etc. The Board is invited to confirm that Challener

does not teach anything that meets the requirements of Appellant's claim as a *whole*, which shows that the Examiner is simply engaging in a cut and paste attempt to cover one claim requirement without taking into consideration the requirements of the invention as a whole.

Second, Challener is gathering data but does not teach or engage in any verification by any source listed in Appellant's claim or otherwise.

Neither of the applied art citations disclose an expressly claimed requirement, and that *prima facie* statutory obviousness therefore has not been made out. If the Examiner fails to establish a *prima facie* case, the rejection is improper and will be overturned. *In re Fine*.

J. Group 10: Claim 14

- 1. Obviousness has not been shown because cited art fails to disclose expressly claimed requirements**
 - a. ... verifiable by using a public key cryptographically-based digital signature.**

Please incorporate by reference the foregoing, especially regarding Group 1, and Group 2, and note that the cited art fails to disclose an expressly claimed requirement of claim 14, and that *prima facie* statutory obviousness therefore has not been made out. *In re Fine*. More particularly, claim 14 requires:

... verifiable by using a public key cryptographically-based digital signature.

The Examiner contends, at page 5 of the Final Rejection, that this is disclosed in Figs. 2A and 7. The Board is invited to look to those portions of Challener relied upon by the Examiner to confirm that there is no teaching in either of these figures of a digital signature, and no teaching of anything being verifiable by means of a digital signature. Though not mentioned by the Examiner, Challener does refer to an "electronic signature" in a different context, and please see Col. 6, line 52 to confirm that Challener's electronic signature is not a teaching of the claim requirement.

Neither of the applied art citations disclose an expressly claimed requirement,

and that *prima facie* statutory obviousness therefore has not been made out. If the Examiner fails to establish a *prima facie* case, the rejection is improper and will be overturned. *In re Fine*.

K. Group 11: Claim 15

1. Obviousness has not been shown because cited art fails to disclose expressly claimed requirements

a. ... further including the steps of generating a private key and a public key pair, and associating the public key with the demographic data and generating a respective participant client-side certificate

Please incorporate by reference the foregoing, especially regarding Group 1, Group 2, Group 5, and Group 6, and note that the cited art fails to disclose an expressly claimed requirement of claim 15 and that *prima facie* statutory obviousness therefore has not been made out. *In re Fine*. More particularly, claim 15 requires:

further including the steps of generating a private key and a public key pair, and associating the public key with the demographic data and generating a respective participant client-side certificate.

As per the discussion above in Groups 6 and 7, Challener does not mention certificates, whether participant client-side certificate or otherwise. Thus, there can be no teaching of Appellant's claimed method step, and especially in the context of the claim as a whole.

The Examiner contends, at page 5 of the Final Rejection, that this is disclosed in Figs. 2A and 7. The Board is invited to look to that portion of Challener relied upon by the Examiner to confirm that nothing about certificates is disclosed where the Examiner asserts or anywhere else in Challener, either.

Appellant cannot explain the Examiner's rejection because certificates are not mentioned in Challener, and no method step involving them is disclosed either. In any case, neither of the applied art citations disclose an expressly claimed requirement, and that *prima facie* statutory obviousness therefore has not been made out. If the Examiner fails to establish

a *prima facie* case, the rejection is improper and will be overturned. *In re Fine*.

L. **Group 12: Claim 20**

1. **Obviousness has not been shown because cited art fails to disclose expressly claimed requirements**
 - a. **... providing equivalent computer systems for carrying out the step of receiving the digital signals over the Internet, said equivalent computer systems communicating to form the accumulation of response data**

Please incorporate by reference the foregoing, especially regarding Group 1 and Group 2, note that the cited art fails to disclose an expressly claimed requirement of claim 20 and that *prima facie* statutory obviousness therefore has not been made out. *In re Fine*. More particularly, claim 20 requires:

providing equivalent computer systems for carrying out the step of receiving the digital signals over the Internet, said equivalent computer systems communicating to form the accumulation of response data.

The Examiner contends, at page 6 of the Final Rejection, that this is disclosed in Figs. 1A and 1C. The Board is invited to look to that portion of Challener relied upon by the Examiner to confirm that there is no disclosure of in Challener of **equivalent computer systems equivalent computer systems... of receiving the digital signals over the Internet ... communicating to form the accumulation of response data.** Fig. 1A does disclose authentication server(s) 225 and journal server(s) 227, and the results server 229. None are shown **receiving the digital signals over the Internet ... AND communicating to form the accumulation of response data** as per Appellant's claim requirements. The same is true in Fig. 1C. The claim requirements as a *whole* have not been shown, and the situation becomes more clear when this dependent claim is read in the context of the requirements of the claim from which it depends.

Neither of the applied art citations disclose an expressly claimed requirement, and that *prima facie* statutory obviousness therefore has not been made out. If the Examiner

fails to establish a prima facie case, the rejection is improper and will be overturned. *In re Fine*.

M. Group 13: Claim 22

1. **Obviousness has not been shown because cited art fails to disclose expressly claimed requirements**
 - a. **... further including the step of encrypting a database formed by carrying out said step of associating**

Please incorporate by reference the foregoing, especially regarding Group 1 and Group 2, and note that the cited art fails to disclose an expressly claimed requirement of claim 22 and that prima facie statutory obviousness therefore has not been made out. *In re Fine*. More particularly, claim 22 requires:

... further including the step of encrypting a database formed by carrying out said step of associating.

The Examiner contends, at page 6 of the Final Rejection, that this is disclosed in Figs. 7-8. The Board is invited to look to that portion of Challener relied upon by the Examiner to confirm that there is no mention of even a database let alone encryption of it. Note too that the claim requires this as a further including step, such that the previously required encrypted participant identification data is separately required. The claim requirements as a *whole* have not been shown, and the situation becomes more clear when this dependent claim is read in the context of the requirements of the claim from which it depends.

Neither of the applied art citations disclose an expressly claimed requirement, and that prima facie statutory obviousness therefore has not been made out. If the Examiner fails to establish a prima facie case, the rejection is improper and will be overturned. *In re Fine*, 837 F.2d 1071, 1074; 5 USPQ2d 1596, 1598 (Fed. Cir. 1988).

N. Group 14: Claims 24/1-6, 24/12-15, 24/20, and 24/22

1. **Obviousness has not been shown because cited art fails to disclose expressly claimed requirements**
 - a. **... includ s issuing a sch ma including said participant demographic data**

Please incorporate by reference the foregoing, especially regarding Group 1 and each interceding Group, and note that the cited art fails to disclose an expressly claimed requirement of claim 22 and that *prima facie* statutory obviousness therefore has not been made out. *In re Fine*. More particularly, claim 24 requires:

... includes issuing a schema including said participant demographic data.

The Examiner contends, at page 6 of the Final Rejection, that this is disclosed in Figs. 2A and 7. The Board is invited to look to that portion of Challener relied upon by the Examiner to confirm that there is no mention of a schema of any sort, there or anywhere else in Challener; nor is there any disclosure of a method for issuing one, let alone one that meets the requirements *as a whole* of the presently claimed invention. There is no mention or disclosure in Challener of a schema.

Neither of the applied art citations disclose an expressly claimed requirement, and that *prima facie* statutory obviousness therefore has not been made out. If the Examiner fails to establish a *prima facie* case, the rejection is improper and will be overturned. *In re Fine*.

O. Group 15: Claim 27

1. Obviousness has not been shown because cited art fails to disclose expressly claimed requirements
 - a. ...associating...said encrypted participant identification data with said registration data and said query-responsive digital signals in producing an accumulation...

Please incorporate by reference the foregoing, especially regarding Group 1, and note that the cited art fails to disclose a claim requirement of claim 27 and that *prima facie* statutory obviousness therefore has not been made out. *In re Fine*. More particularly, claim 27 requires:

associating, by computer, said encrypted participant identification data respectively with said registration data and said query-responsive digital signals

Reference is made to the above discussion for Group 1 that Challener teaches processing after the data is *decrypted* while Appellant claims associating...encrypted participant identification data.

In the Office Action dated 5/08/02, at pages 6 (which refers to page 4 of the Office Action), the Examiner writes that "Challener teaches... associating the encrypted data...(Fig. 7.)"

To the contrary, Fig 7. shows the opposite. There are 3 critical boxes in Fig. 7: SEND ENCRYPTED INFORMATION TO AUTHENTICATION SERVER 379; UTILIZE AUTHENTICATION SERVER TO DECRYPT MESSAGE 381; and ARE IDs AUTHENTIC 383. Fig. 7 shows that encrypted data sent in box 379 is *decrypted* in box 381 before being processed in box 383 etc.

Not only does the Fig. 7 contradict the Examiner's contention, Challenger's specification also explicitly teaches *decrypting* data prior to a time when any associating could be done. Challener is not doing the claimed associating encrypted data as Challener explicitly states: "... the authentication server is utilized to decrypt the message to determine the identity of the voter" (Col. 7, line 62). Indeed, Challener states that subsequent to the decryption in box 381: "in accordance with block 383, the authentication server examines the identification information to determine whether the identification is authentic..." Thus, Challener's examining is carried out with *decrypted* data, and there is no teaching or suggestion or even capability to do Appellant's claimed associating the encrypted participant identification data...to produce a demographic profile.

In the Amendment and Response filed November 7, 2002, Appellant presented the argument that Challener *decrypts* its data before any associating would even be arguably possible, so Challener cannot teach or even handle Appellant's claimed associating the encrypted participant identification data.... However, the Examiner replied at the bottom of

page 7 of the Final Rejection:

In response to Appellant's argument that Challener fails to teach associating the encrypted participant identification data as claimed in claims 1, 28 and 29, examiner believes that Challener teaches this matter, in particular at column 7, lines 50-60.

The Board's attention is drawn to where the Examiner directs as the basis of the rejection. There is nothing at that location or elsewhere in Challener teaches or suggests the claimed method step of:

associating the encrypted participant identification data, the response data, and the demographic data, respectively, to produce a demographic profile corresponding to an accumulation of the response data from encrypted identities

The Examiner's position is not easy to understand especially because Appellant's claim 1 makes multiple references to the encrypted participant identification data, and whatever the Examiner is thinking of does not seem to fit all the claim requirements for the encrypted participant identification data. Additionally, in response to the Examiner's comments in the Final Rejection, whether a smart card is used or not, the voter identification is encrypted onto the card as per Challener Col. 3, lines 10-11, and *decrypted* by UTILIZE AUTHENTICATION SERVER TO DECRYPT MESSAGE 381 before any processing involving the *known* voter identity.

Respectfully, Appellant cannot explain the rejection in view of what seems to be an explicit contradiction in Challener of the Examiner's contention. In sum, though, the cited art fails to disclose expressly claimed requirements, and that *prima facie* statutory obviousness therefore has not been made out. If the Examiner fails to establish a *prima facie* case, the rejection is improper and will be overturned. *In re Fine*.

b. ... certifying, by computer...

Please incorporate by reference the foregoing, especially regarding Group1, Group 5, and Group 6, and note that the cited art fails to disclose an expressly claimed requirement of claim 27 and that *prima facie* statutory obviousness therefore has not been

made out. *In re Fine*. More particularly, claim 27 requires:

... certifying, by computer....

The Examiner contends, at page 6 of the Final Rejection, that this is disclosed at Col. 7, line 38-Col. 8, line 9 and Fig. 7. The Board is invited to look to that portion of Challener relied upon by the Examiner to confirm that there is no mention of certifying. The claim requirements as a *whole* have not been shown, and the situation becomes more clear when this dependent claim is read in the context of the requirements of the claim from which it depends.

Neither of the applied art citations disclose an expressly claimed requirement, and that *prima facie* statutory obviousness therefore has not been made out. If the Examiner fails to establish a *prima facie* case, the rejection is improper and will be overturned. *In re Fine*.

c. ... respectively receiving said registration data and query-responsive digital signals

Please incorporate by reference the foregoing, especially regarding Group 1, Group 5, and Group 6, and note that the cited art fails to disclose an expressly claimed requirement of claim 27 and that *prima facie* statutory obviousness therefore has not been made out. *In re Fine*. More particularly, claim 27 requires:

... respectively receiving said registration data and query-responsive digital signals.

The Examiner contends, at page 6 of the Final Rejection, that this is disclosed at Col. 7, line 38-Col. 8, line 9 and Fig. 7. The Board is invited to look to that portion of Challener relied upon by the Examiner to confirm that there is no mention of ... respectively receiving said registration data and query-responsive digital signals. The claim requirements as a *whole* have not been shown, and the situation becomes more clear when this dependent claim is read in the context of the requirements of the claim from which it depends.

Neither of the applied art citations disclose an expressly claimed requirement,

and that *prima facie* statutory obviousness therefore has not been made out. If the Examiner fails to establish a *prima facie* case, the rejection is improper and will be overturned. *In re Fine*.

d. **such that it is not possible to directly associate said participant identification data with either said registration data or said query-responsive digital signals**

Please incorporate by reference the foregoing, especially regarding Group 1, and note that the cited art fails to disclose a claim requirement of claim 27, and that *prima facie* statutory obviousness therefore has not been made out. *In re Fine*. More particularly, claim 27 also requires:

such that it is not possible to directly associate said participant identification data with either said registration data or said query-responsive digital signals...

Contrary to the Examiner's assertion discussed more particularly in Group 1, the claimed negative limitation is not only possible in Challener, it is actually done twice in Challener.

That is, Challener encrypts participant identification data with either said registration data as discussed at Col. 7, lines 53-57 in block 379 teach in relevant part:

the data processing system operating as the "Internet client" encrypts the voter identification information (which may include any or all of the voter's name, address...)

At this point, contrary to Appellant's claims it is possible to directly associate said participant identification data with either said registration data, and indeed it is actually done in Challener.

It is done again when this data is *decrypted* in block 383 of Challener.

The Examiner relies in the Final Rejection at page 6, lines 16-17 on Col. 7, line 38-Col. 8, line 9 and Fig. 7. This text includes the text discussed above by Appellant, and indeed the teaching is again contrary to the Examiner's contention. Nothing in Challener teaches a method step of

associating, by computer, said encrypted participant identification data respectively with said registration data and said query-responsive digital signals in producing an accumulation such that it is not possible to directly associate

said participant identification data with either said registration data or said query-responsive digital signals

and indeed Challener teaches the contrary. So neither of the applied art citations disclose an expressly claimed requirement, and that prima facie statutory obviousness therefore has not been made out. If the Examiner fails to establish a prima facie case, the rejection is improper and will be overturned. *In re Fine*, 837 F.2d 1071, 1074; 5 USPQ2d 1596, 1598 (Fed. Cir. 1988).

P. Group 16: Claims 28-29

1. Obviousness has not been shown because cited art fails to disclose expressly claimed requirements

Please incorporate by reference the foregoing, especially Group 1.

It was observed during preparation of this Brief that an error in claims 28-29 had gone undetected by either the undersigned or the Examiner. A corrective amendment is being filed herewith to clarify that more than one computer is involved in the carrying out of these claims. An apology is offered for any confusion caused by the error. No further issues are believed to be raised by this amendment as the certifying is referenced in other claims, e.g., 6, 7, 15, etc.

Q. Group 17: Claim 30

1. Obviousness has not been shown because cited art fails to disclose expressly claimed requirements

a. ...storing in a browser

Please incorporate by reference the foregoing, especially regarding Group 1 and note that the cited art fails to disclose an expressly claimed requirement of claim 30 and that prima facie statutory obviousness therefore has not been made out. *In re Fine*. More particularly, claim 30 requires:

...storing in a browser.

The Examiner contends, at pages 6-7 of the Final Rejection, that this is

disclosed in McClure at Col. 36, line 58. The Board is invited to look to that portion of Challener relied upon by the Examiner to confirm that there is no mention of any ...storing in a browser or of a data structured for doing so.

Neither of the applied art citations disclose an expressly claimed requirement, and that prima facie statutory obviousness therefore has not been made out. If the Examiner fails to establish a prima facie case, the rejection is improper and will be overturned. *In re Fine*.

R. Group 18: Claims 30-31

It was observed during preparation of this Brief that an error in claims 30-31 had gone undetected by either the undersigned or the Examiner. A corrective amendment is being filed herewith to ensure that claims 30 and 31 depend on other method claims, not an apparatus claim. An apology is offered for any confusion by the error. No further issues are believed to be raised by this amendment.

XI. **CONCLUSION**

For the reasons more fully set out above, the Examiner has not met the statutory burden of proof for withholding a patent on the instant claims, based on the evidence of record. And because the pending claims have not been shown to be *prima facie* unpatentable, the rejection should be reversed, and allowance is respectfully requested.

Respectfully submitted,



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App endix

1. A computer-aided method for conducting a poll with high reliability to produce a demographic profile corresponding to an accumulation of response data from encrypted identities, the method including:

for each one of a plurality of local computers, carrying out registration substeps of:

- (i.) receiving an application for participant registration, the application including participant identification data and participant demographic data; and
- (ii.) if said application is accepted, then issuing respective registration data, including encrypted participant identification data;

thereafter, for a portion of the local computers, carrying out polling substeps of:

- (iii.) receiving digital signals over the Internet including the encrypted participant identification data and poll response data for a first question in a poll; and
- (iv.) responsive to said receiving of said encrypted participant identification data, preventing more than one respective response to the first question; and

associating the encrypted participant identification data, the response data, and the demographic data, respectively, to produce a demographic profile corresponding to an accumulation of the response data from encrypted identities.

2. The method of claim 1, wherein said polling substeps and said step of associating are carried out devoid of the participant identification data.

3. The method of claim 2, further including the step of generating a printed report including data generated from the accumulation of the response data and from the participant demographic data.

4. The method of claim 2, further including the steps of generating a report including an extract of some but not all from the group consisting of the accumulation of response data from the first question, an accumulation of response data for a second question, and the demographic data; and

storing said extract on memory media to form an article of manufacture.

5. The method of claim 2, further including the step of generating a report including data generated from the group consisting of the accumulation of response data from the first question, an accumulation of response data for a second question, and the demographic data.

6. The method of claim 2, further including the step of off line generating certificates of authorization as a portion of said registration data.

7. The method of claim 6, wherein said certificates include a periodic time limit requiring updating said demographic data.

8. The method of claim 6, wherein said demographic data cannot be modified under participant control.

9. The method of claim 2, wherein said steps of carrying out the polling substeps, and said associating the encrypted identification data, the response data, and the demographic data to produce a demographic profile, do not include accessing said participant identification data.

10. The method of claim 2, wherein said step of receiving digital signals over the Internet including the encrypted identification data and data representing the polling data for a first question in a poll is computed asynchronously to computing for said step of preventing more than one response on the question for the corresponding registration.

11. The method of claim 10, wherein said step of preventing more than one response on the question for the corresponding registration includes allowing over-writing a prior response.

12. The method of claim 2, wherein said step of receiving from one of said computers an application for registration is carried out with said demographic data including a data set of at least three members from the group consisting of residence, age, gender, party, income, and race.

13. The method of claim 2, wherein said step of receiving from one of said computers an application for registration is carried out with said demographic data including a data set of at least two members of the group consisting of residence, age, gender, party, income, and race, and said members are verified in determining if said application is accepted, said members verified by checking at least one source from the group consisting of a charge card, a debit card, a bank card, and a drivers license.

14. The method of claim 2, wherein said step of receiving digital signals over the Internet including the encrypted participant identification data is made verifiable by using a public key cryptographically-based digital signature.

15. The method of claim 2, further including the steps of generating a private key and a public key pair, and associating the public key with the demographic data and generating a respective participant client-side certificate.

16. The method of claim 2, further including the step of cross-certifying an issuer of certificates for participant authentication.

17. The method of claim 2, wherein said substeps of receiving an application for participant registration, and issuing respective participant registration data are carried out with a certifying authority computer system; and wherein said sub step of receiving digital signals over the Internet is carried out by a politics portal web site, and further including the step of communicating said participant registration data from said certifying authority computer system to a computer system in communication with said politics portal web site.

18. The method of claim 2, wherein said step of receiving digital signals over the Internet including the encrypted participant identification data and data representing response data includes receiving a response as a signed XML construct providing a pseudononymous identity for carrying out said step of associating the encrypted participant identification data, the response data, and the demographic data with the pseudononymous identity as the encrypted participant identification data.

19. The method of claim 2, further including the step of disaggregating said accumulation of the response data in accordance with a portion of said demographic data to produce the demographic profile.

20. The method of claim 2, further including the step of providing equivalent computer systems for carrying out the step of receiving the digital signals over the Internet, said equivalent computer systems communicating to form the accumulation of response data.

21. The method of claim 2, further including the step of receiving digital signals over the Internet from a participant including signals triggering a voiding of the corresponding prior response data for the first question in a poll.

22 The method of claim 2, wherein further including the step of encrypting a database formed by carrying out said step of associating.

23 The method of claim 2, wherein further including the step of forming a data structure mapping a database formed by carrying out said step of associating, said data structure mapping the database to consistently form a pattern of data types.

24. The method of any one of claims 1-23, wherein the step of issuing respective registration data, including encrypted participant identification data, includes issuing a schema including said participant demographic data.

25. The method of any one of claims 1-23, further including the step of providing duplicative electronic pathways for carrying out the step of receiving digital signals over the Internet.

26. The method of any one of claims 1-23, further including linking a remotely

mirrored logging facility to a host computer carrying out said step of receiving of said encrypted participant identification data; and providing said host computer with redundant power and redundant internet feeds.

27. A method for high reliability communication of demographic data from encrypted identities, the method including:

(i.) certifying, by computer, a plurality of respective registrations by substeps including:

receiving a plurality of respective participant registration applications including respective participant identification data and participant demographic data; and

for any respective one of said applications accepted for authorization, issuing respective registration data, including encrypted participant identification data and encrypted participant demographic data; and

(ii.) using, by computer, said registration data in substeps of:

respectively receiving said registration data and query-responsive digital signals; and

associating, by computer, said encrypted participant identification data respectively with said registration data and said query-responsive digital signals in producing an accumulation such that it is not possible to directly associate said participant identification data with either said registration data or said query-responsive digital signals.

28. A machine for conducting a poll with high reliability to produce a demographic profile corresponding to an accumulation of response data from encrypted identities, the machine including:

a digital electrical computer apparatus including a digital computer having a

processor, the processor electrically connected to a memory device for storing and retrieving machine-readable signals, to an input device for receiving input data and converting the input data into input electrical data, and to an output device for converting output electrical data into output having a visual presentation, the processor being programmed to control the apparatus to receive the input data and to produce the output data by steps including:

- (i.) carrying out registration substeps of:
 - receiving a participant registration application including participant identification data and participant demographic data; and
 - if said application is accepted, then issuing respective registration data, including encrypted participant identification data; and
- (ii.) thereafter, carrying out polling substeps of:
 - receiving digital signals over the Internet including the encrypted participant identification data and poll response data for a first question in a poll; and
 - responsive to said receiving of said encrypted participant identification data, preventing more than one respective response to the first question; and
 - associating the encrypted participant identification data, the response data, and the demographic data, respectively, to produce a demographic profile corresponding to an accumulation of the response data from encrypted identities.

29. A method for making machine for conducting a poll with high reliability to produce a demographic profile corresponding to an accumulation of response data from encrypted identities, the method including the steps of:

providing a digital electrical computer apparatus including a digital computer having a processor, the processor electrically connected to a memory device for storing and retrieving machine-readable signals, to an input device for receiving input data and converting

the input data into input electrical data, and to an output device for converting output electrical data into output having a visual presentation;

programming the processor being programmed to control the apparatus to receive the input data and to produce the output data by steps including:

(i.) carrying out registration substeps of:

receiving a participant registration application including participant identification data and participant demographic data; and

if said application is accepted, then issuing respective registration data, including encrypted participant identification data; and

(ii.) thereafter, carrying out polling substeps of:

receiving digital signals over the Internet including the encrypted participant identification data and poll response data for a first question in a poll; and

responsive to said receiving of said encrypted participant identification data, preventing more than one respective response to the first question; and

associating the encrypted participant identification data, the response data, and the demographic data, respectively, to produce a demographic profile corresponding to an accumulation of the response data from encrypted identities.

30. The method of any one of claims 1, 28, 29, and 30, wherein said issuing respective registration data includes issuing respective registration data as an electronic message for storing in a browser.

31. The method of any one of claims 1, 28, 29, and 30, wherein said issuing respective registration data includes issuing respective registration data into memory of a smartcard.